CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DRAFT

Mr. Ronald Frehner
Project Coordinator - ACS NPL Site
Conestoga-Rovers & Associates
1801 Old Highway 8, Suite 114
St. Paul, Minnesota 55112

Dear Mr. Frehner:

The United States Environmental Protection Agency (U.S. EPA) and th Indiana Department of Environmental Management (IDEM) have completed review of the second round of water levels (draft) and proposal for the Tracer Investigation submitted to U.S. EPA/IDEM in accordance with Task 5 of the Upper and Lower Aquifer Characterization of the Pre-Design Work Plan for the American Chemical Services, Inc. Site located in Griffith, Indiana (as approved by U.S EPA's letter dated September 21, 1995). Assuming that the final water level data will not change drastically once it is validated, U.S. EPA and IDEM have reviewed the proposal and provide the comments enclosed with this letter.

U.S. EPA and IDEM representatives will meet with Montgomery Watson on November 13, 1995, to discuss these issues further. If all issues are satisfactorily addressed, then Respondents can proceed with the Tracer Investigation in Task 6 as indicated in U.S. EPA's September 21st letter. The actual locations for the Tracer Investigation are subject to field approval by U.S. EPA and IDEM.

If you have any questions, or require clarification, you may reach me at (312) 886-4745.

Sincerely,

Sheri L. Bianchin
Remedial Project Manager

Enclosures

Enclosure #1

Following are U.S. EPA/IDEM Comments regarding the proposed Tracer Investigation.

The goal of the Tracer Investigation is to aid in locating the edge of the plume (i.e., non-detection of VOCs in the Tracer Investigation) leading to the installation of monitoring wells. As was previously communicated to you, both U.S. EPA and IDEM are in favor of the use of the screening methods (i.e., Tracer Investigation) in order to better understand and characterize the groundwater contamination. However, it is important to stress that the chosen method is only a screening method and only an indicator of the extent of contamination. For example, by using a head space analysis, the results yielded are only a relative indicator of the presence of contaminants. Detecting a compound in the headspace is an indicator of the presence of the compounds present in the gas sample analyzed, but is not an accurate measure of the concentration of water nor does it prove absence of contamination.

As stated in the Predesign Work Plan, the field screening analyses will allow field judgments to be made for locating the next sampling point . . . U.S. EPA agrees that the screening method will be an iterative approach to aid in placing wells to verify both presence and absence of contamination. To this end, it will be counterproductive to limit the investigation to a certain number of samples (i.e., 50). It will necessary to make field decisions regarding actual locations and the exact numbers of samples necessary to get complete information. Having said this, U.S. EPA believes that the proposal submitted by Montgomery Watson on behalf of the Respondents basically appears to be comprehensive. However, the following 4 deficiencies must be addressed.

1) U.S. EPA requires that several tracer samples be taken near the residential areas near Reeder Road;

2) EPA/ IDEM may require several additional tracer samples to be taken at an additional depth at the apparent plume boundary in the upper aquifer (See attached comments regarding the Field Sampling Plan contained in the QAPP). This would probably be required in the northwest part of the site;

3) U.S. EPA requires that the samples be taken at more frequent intervals near P 61/62 and the wetlands area; and

4) U.S. EPA requires that the number of actual tracer samples be somewhat flexible.

Furthermore, U.S. EPA and IDEM feel that additional screening work may be prudent in the future after the results of this effort are fully analyzed.

Enclosure #2

Following are draft comments pertaining to the Pre-Design QAPP regarding the Tracer Investigation. These comments will be provided in a final comment letter pertaining to the entire QAPP.

General Comments:

1. The following comments were not adequately addresses in your responses to comments: #72, 74, 75, 76, 78, 79 and 80. These need to be addressed in the Revision 2 of the QAPP.

2. Number the SOPs for ease of reference.

3. The figures noted in the field sampling plan (FSP) table of contents are not included in the document. These need to be provided.

4. Several of the SOPS are missing figures. Provide these figures.

Specific Comments.

5. Section 1.3, PROJECT OBJECTIVES AND SCOPE.

   a. Section 1, page 3, paragraph 3. The reference to the Field Gas Chromatograph (GC) Target Analyte List of Detection Limits has not been included. Please add this reference.

   b. Add the following language: The analysis of sample is a head space is only a relative indicator of the presence of contaminants. Detecting a compound in the headspace is an indicator of the concentrations of the compounds present in the gas sample analyzed, but not the accurate measure of the concentration of water.

6. Section 2.2, PROJECT ORGANIZATION AND RESPONSIBILITY

   Include the field screening analysis of selected VOCs by Tracer Research Corporation, Tucson, AZ.

7. Section 7, ANALYTICAL PROCEDURES.

   a. Add project specific details in this Section (i.e., deviations from the SOP and any rationales.)

   b. Regarding the PARAMETERS. The information presented in this section should concur with QAPP TABLES 1-1 and 1-3.

   c. Section 7.1, Last line. Add the word "Table" in front of the # 7-1.

8. TABLE 1-1.

It is indicated that the lab method is vendor. This description is not adequate.

9. TABLE 7-1.

For Field Measurements VOC Screening reference SOP in Appendix B Groundwater Field Screening Method.

10. APPENDIX A, Field Sampling Plan (FSP)

a. Table of Contents LIST OF FIGURES

Figures 1 to 3 and 7 to 10 were not included. Clarify this discrepancy.

b. Section 3.1 of the FSP.

Revise the name of the Section to be Groundwater Contamination Investigation. Revise the text of the section to reflect the Groundwater contamination investigation as it was approved in U.S. EPA's September 21, 1995 letter.

11. Section 5.1.3 of the FSP, Upper Aquifer Tracer Investigation.

a. Add project specific details in this Section (i.e., deviations from the SOP and any rationales.)

b. To be clear, discuss whether the water sample or the gas sample will be analyzed or both.

c. Regarding Comment Response #74. The response states that "The actual depth for sample collection will be specified in Section 5.1.3 of the FSP." This information is not specified in the document and must be provided. Furthermore, specify whether the sample is withdrawn from the tip of the probe or from a specified interval due to a screened interval.

Regarding the depth of sample, it is inadequate to state that the sample probe will be pushed into the ground to a depth of at least one foot below the water table is inadequate, the sample depth must be specified. U.S, EPA prefers that the sample be collected approximately 5 feet below the top of the water table given that there is a downward gradient in the upper aquifer.

Furthermore, at some locations where the tracer sample result is below the limits of detection, EPA may request an additional deeper tracer samples below the other sample taken in the water table aquifer. It is likely additional

sampling will be requested at the western area of the site given that this area is the furthest downgradient area.

These depths well be somewhat flexible are subject of a field decision including input from U.S. EPA/IDEM representatives.

d. Add the following language: The analysis of sample is a head space is only a relative indicator of the presence of contaminants. Detecting a compound in the headspace is an indicator of the concentrations of the compounds present in the gas sample analyzed, but not the accurate measure of the concentration of water.

e. Discuss the indicator parameters that are subject to investigation and the rationale for choosing the indicator parameters.

12. APPENDIX B Groundwater Field Screening Method

a. Regarding Response to Agency Comment 77 (8/14/95):

When this analytical method is optimized prior to the start of the work, the list of target compounds, PQLs, and retention times should be provided and attached to the QAPP.

b. Regarding Response to Agency Comment 78 (8/14/95):

Specify the concentration of the single point calibration standard, more levels are recommended. "The goal of the Tracer Investigation is to locate the edge of the plume (i.e., non-detection of VOCs in the Tracer Investigation) leading to the installation of a monitoring well." (PWP Section 4.1.1 fifth step) The Reported Detection Limits (RDLs) given in QAPP TABLE 3-4 are 1 ug/L for most compounds. Certainly, this single point calibration standard, more points are recommended, should be at, or near, these RDLs.

13. Appendix B, Field Screening SOP.

a. Any differences from the SOP provided by the vendor must be specifically noted in the QAPP so that the methods are project specific. For example, the differences may be noted in an introduction section to the SOP, in Section 7, Analytical Procedures of the QAPP and in the FSP in Appendix A.

b. Provide separate SOPS or specify the following procedures in the existing SOP: all project specific qa/qc procedures; headspace sampling and preparation method (e.g., preservatives used, water bath temperature); hole abandonment or backfilling procedures; and project specific

field GC procedures. Lastly, if there will be an attempt to create a boring log with the tracer tool, then provide a SOP to discuss how this will be performed.

c. Provide the SOPs for Methods 8010/8020 referred to in the QAPP for field screening in Table 7.1

d. When collecting samples for volatile organic compounds, it is recommended that a field blank and a trip blank should accompany the sample bottles throughout the day. These blanks should also be analyzed using the field GC.

14. APPENDIX C, Field Standard Operating Procedures

Purgeable Volatiles 701

This SOP has not been listed in the Table of Contents LIST OF APPENDICES. Define what this SOP is for. For example, discuss if it was possibly intended for the Vertical Profile Groundwater analysis of VOCs. It has not been referenced anywhere in the QAPP. If it has no project function, delete this SOP.